

## Appendix H

### Notation

The symbols that follow are used throughout this manual and correspond wherever possible to those recommended by the American Society of Civil Engineers.

Symbol	Term
$c$	Cohesion per unit area; a constant for natural top stratum  where $c = \sqrt{\frac{k_{bl}}{k_f z_{bl} d}}$
$c'$	Effective cohesion in terms of effective stress
$c_v$	Coefficient of consolidation
$C_c$	Compression index
$C_a$	Coefficient of secondary compression
$d$	Effective thickness of pervious substratum
$e$	Void ratio
$F_t$	Transformation factor for permeability
$h_o$	Excess hydrostatic head
$h'_o$	Hydrostatic head beneath landside toe of levee
$h_x$	Hydrostatic head beneath top stratum
$H$	Net head
$i_c$	Critical gradient for landside top stratum
$i_1$	Upward gradient at landside toe of berm
$i_o$	Upward gradient at landside toe of levee
$k$	Coefficient of permeability
$k_b$	Coefficient of permeability (top stratum)
$k_f$	Average horizontal coefficient of permeability
$k_n$	Coefficient of permeability (vertical)
$k_{bl}$	Permeability of landside stratum
$k_{br}$	Permeability of riverside stratum
$L_1$	Distance from riverside levee toe to river
$L_2$	Base width of levee and berm
$L_3$	Length of top stratum landward of levee toe
$M_d$	Slope of hydraulic grade line

(Continued)

Symbol	Term
Q	Shear test for specimen tested at constant water content (unconsolidated-undrained)
$Q_s$	Total amount of seepage passing beneath levee
R	Shear test for specimen consolidated and then sheared at constant water content (consolidated-undrained)
s	(a) distance from the landside toe of the levee to the point of effective seepage entry (b) shear test for specimen consolidated and sheared without restriction of change in water content (consolidated-drained)
$x_1$	Effective length of riverside blanket
$x_3$	Distance from landside levee toe to effective seepage exit
$z_b$	Effective thickness of stratum
$z_t$	Transformed thickness of top stratum
$z_{bl}$	Effective thickness of landside top stratum
$z_{br}$	Effective thickness of riverside top stratum
$z_{bt}$	Effective thickness of top stratum
$\bar{\alpha}$	Wet unit weight of soil
$\bar{\alpha}_w$	Unit weight of water
$\bar{\alpha}'$	Submerged or buoyant unit weight of soil
$\bar{\phi}'$	Angle of internal friction based on effective stresses
$\$$	Shape factor to generalized cross section of the levee and foundation